Laying base for temporary road

Laying base for temporary road, note security fencing

Laying drainage under low spot of temporary road

Temporary road entrance from Armour Road.

Paved segment of the temporary road

Relocating power poles. Pole eventually removed.

New power pole installed on NS property

Stringing power to the NS Poles

Cut RR Ave at the eastern most part of the RR Ave RA

RR Ave demolition ready for disposal

Demolition debris being loaded for off-haul

Initial RR Ave cut, eastern most area

In-situ field testing with the XRF

72” RCP storm sewer crown exposed

RR Avenue excavated soil staging area looking east

RR Avenue excavated soil staging area looking west

Preparation of hot tap of Municipal water line

New Municipal water valve. RR Ave pipe segment isolated and removed

RAILROAD AVENUE PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

RR Ave excavated with 72” storm water pipe removed

RR Ave south wall. Painted numbers are arsenic concentrations

North wall showing brown loess backfill from the 2006 RA

38,200 mg/kg arsenic south sidewall. Contamination was removed.

Distinctive yellow/orange color of arsenic contamination

Distinctive area treated in-situ.

In-situ placement and mixing of Enviroblend

Highly variable arsenic concentrations along the north sidewall. All removed

North wall showing the brown loess from the 2006 RA overlying contamination that was removed during the 2016 RA

Slot cut trenching along the south wall to remove additional arsenic mass. Gravel is bridging backfill

Sidewall sample collected off the vertical face with the excavator bucket.

72” RCP being cut to fit the new connector box placed at this location

RCP plug to prevent water flow into the excavation

Connector box and new 72” RCP storm water pipe

Storm water drop inlets installed for the new Railroad Ave

Storm water laterals sealed

Lateral joint with deflection begin sealed

New 72” RCP alignment.

Backfill started

Backfill continues, watering to achieve compaction

Backfill half completed

Thrust block form for new Municipal water pipe

Municipal water pipe being placed

New Railroad Avenue curbs and base placed

New Railroad Avenue storm water drop inlets

New Railroad Avenue paved near track crossing

New Railroad Avenue paved looking east

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

Initial excavation

Excavation continues south sump discovered

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

Found old footings near sump **Sump being removed**

Arsenic under the sump (yellow)

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

Sump gone **Contaminated soil** **Clean**

Excavation continues south to remove contaminated southern wall (exceeds 3,500 mg/kg)

Excavation to the south, high contamination at sump elevation

Sump area cut to the south and deep, upper bench is sump elevation. Former land surface highly contaminated.

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

Sidewall south of the Sump shows lateral arsenic migration at the sump elevation and much lower arsenic concentrations in surrounding soil

East wall along HABCO property line, much lower arsenic contamination than in sump area

Bench cuts west of the sump excavating to clean soil

Excavation continues north along the HABCK/Sutherlands property lines. Old piping found. Light brown soil is loess fill from 2006, dark soil is native soil being removed

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

Excavation along the HABCO/Sutherlands property line. Brown soil is clean fill from 2006, dark soil is being removed.

Dark contaminated soil being complete removed to reveal clean backfill from 2006 RA

Sutherland's area to the north nearing old building piles, underground plumbing; increasing contamination including tar.

Six large concrete slabs found on piers. Arsenic contamination under the slabs

SUTHERLANDS PHOTO LOG

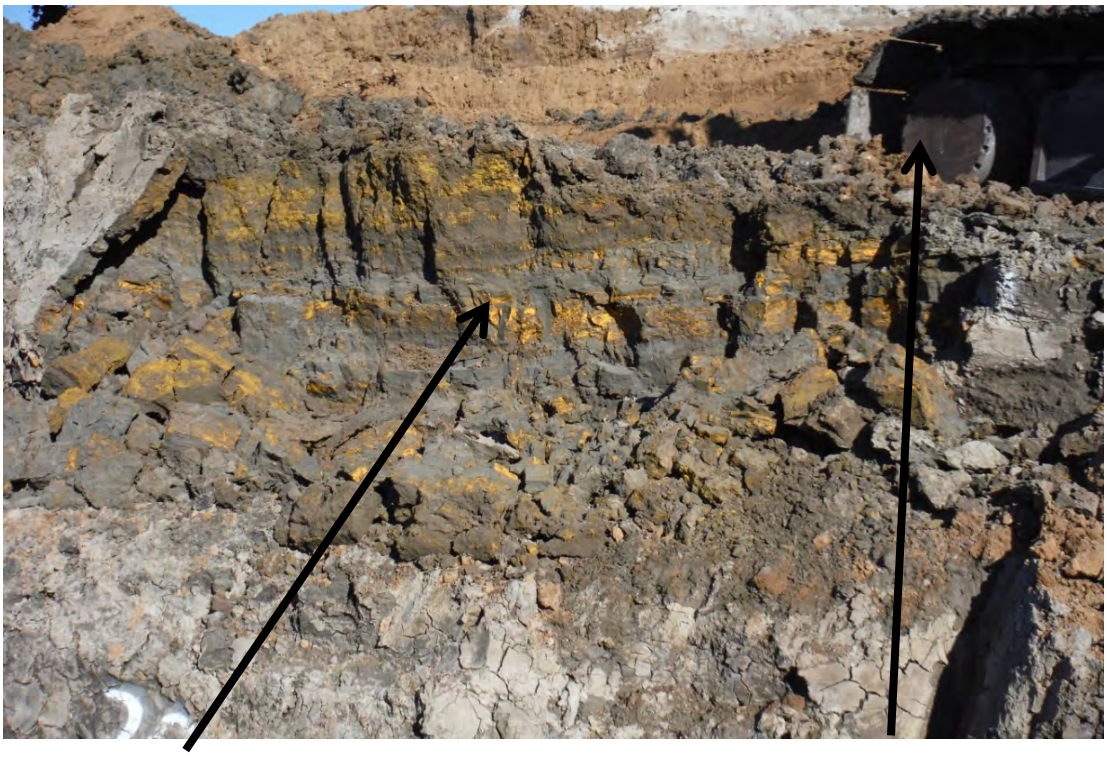
RIO TINTO
LEGACY MANAGEMENT

Piers

Excavation around the old foundations

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT



Arsenic around the slabs up to 24,000 mg/Kg **Slab**

Foundation slabs temporarily removed to allow further excavation

SUTHERLANDS PHOTO LOG

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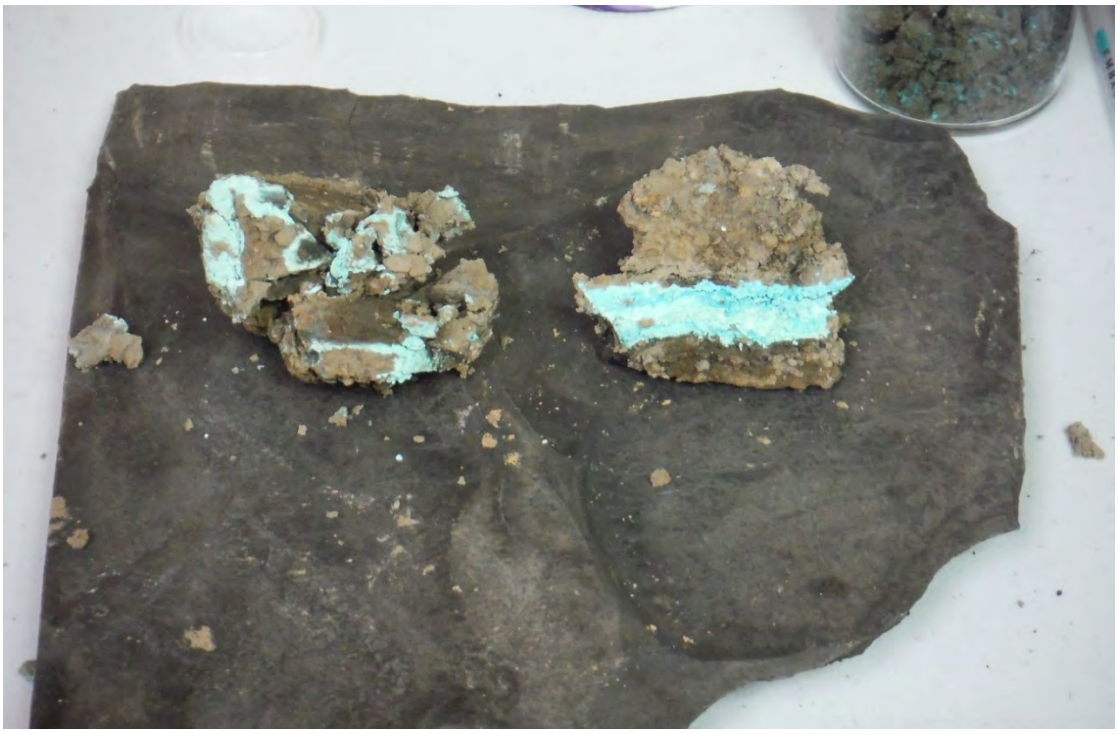
Slab stockpile

Copper contamination near the old foundations



Samples of copper contamination

East wall excavation continues past the old foundations revealing clean fill from the 2006 RA

SUTHERLANDS PHOTO LOG

RIO TINTO
LEGACY MANAGEMENT

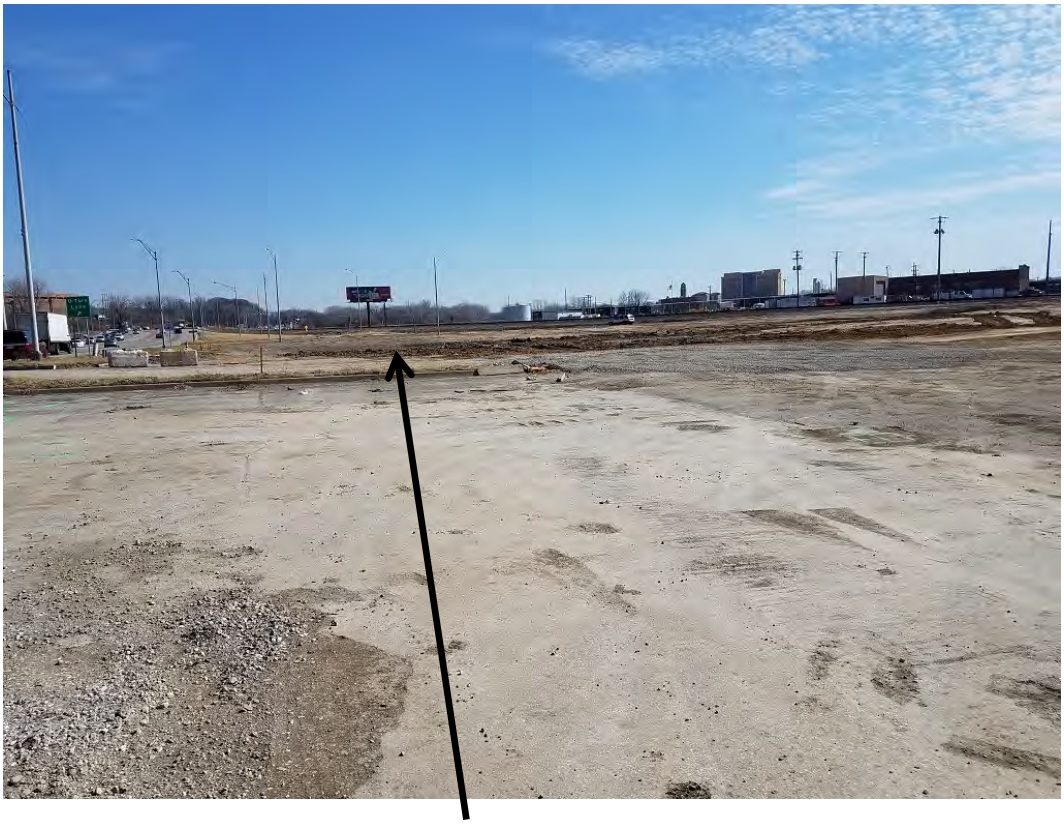
Excavation reveals the out-of-service natural gas pipe

Sutherlands excavation being backfilled

Sutherlands soil management area, backfilled excavation in the background

FINAL SITE CONDITIONS

Demobilization complete, view north, Sutherlands on left; RR Ave on right



View toward the RR Ave soil staging area

FINAL SITE CONDITIONS

West end of the RR Ave excavation, road rebuilt

East end of the RR Ave excavation, road rebuilt

FINAL SITE CONDITIONS

RR avenue soil staging area scraped clean

After demobilization, Sutherlands completely backfilled